



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,703	11/25/2003	Jennifer Farrell	200209668-1	6276
22879 7590 03/18/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER QIN, YIXING	
			ART UNIT 2625	PAPER NUMBER
			NOTIFICATION DATE 03/18/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
mkraft@hp.com
ipa.mail@hp.com

Office Action Summary	Application No. 10/721,703	Applicant(s) FARRELL ET AL.	
	Examiner Yixing Qin	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 12/18/07 have been fully considered but they are not persuasive. The argument is that the color processing mode selector seems to describe a print setting and is not a print mode actuator. In P[0010] of the applicant's specification, the print mode actuator is described as "any user-accessible mechanical, electrical, or electrical-mechanical device, for example, a push button or a toggle switch, or a button presented in a touch screen, etc.." Thus, the setting selection is an user accessible, electrical device, similar to a button on a touch screen. It's just in the Nakajima case that instead of a button on a touch screen, it's a setting screen where an user can use a pointing device to select a mode. This should fall within the scope of devices as described above. Even though the mode selector of Nakajima is in the image processing apparatus and not on printer device 3, the image processing apparatus can reasonably read upon the claimed image forming device.

All other arguments are directed towards claims that are obvious variations of claim 1 as argued. The are also directed towards whether the Nakajima reference actually discloses or at least suggests a print mode actuator. According to the arguments above, it is believed that the print mode setting of Nakajima can reasonably read upon the print actuator because of the function it performs. It is just simply represented in a different manner (although well known) than the applicant argues, as described above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I. Claims 1-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima (U.S. Patent No. 6,701,011)

Regarding claims 1, 9, 16, 24, 27, Nakajima discloses a method, comprising:
receiving a document for printing in an image forming device, wherein
a print mode setting is associated with the document; (Fig. 5, item S61 and column 11, lines 4-15 – the analyzer performs color processing in accordance with the setting of the object forming the image. See also Figs. 16A and B where there is a color processing mode of the image forming device, and the print setting (i.e. photo, graphics, or text))

It does not explicitly disclose “printing at least a portion of the document monochromatically or in color based upon the print mode setting and a state of a print mode actuator in the image forming device.”

However, Nakajima discloses in Figs. 16A, 16B, and 17 – one can see the monochrome mode can be forced on a monochrome printer. Column 10, lines 30-40 that text is preferably printed in black. Thus, a logical assumption is that at least the

photo or graphic option is preferably printed in color. This means the text, graphics, and photo modes are analogous to having a color and monochrome print setting.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have color and monochrome settings.

The motivation would have been that the color and monochrome settings are essentially generic options, whereas the Nakajima reference discloses more specific types of data to be printed.

Therefore, it would have been obvious to alter Nakajima to obtain the invention as specified.

Regarding claim 2, 10, 17, 28, Nakajima discloses the method of claim 1, wherein the printing of the at least a portion of the document monochromatically or in color based upon the print mode setting and the state of the print mode actuator in the image forming device further comprises implementing an execution of a monochromatic raster image processing of the document if the print mode setting specifies a monochromatic print setting. (Figs. 1 and 2 discloses image processor 13 for converting image data to be print ready data. Fig. 5, S65-69 shows the deciding of type of file to print, and processing occurs differently for each type of file – thus the text parameters would be analogous to having monochrome processing)

Regarding claim 3, 11, 18, Nakajima discloses the method of claim 1, wherein the print mode actuator includes at least an application state and a monochromatic

override state, and the printing of the at least a portion of the document monochromatically or in color based upon the print mode setting and the state of the print mode actuator in the image forming device further comprises implementing an execution of a color raster image processing of the document if the print mode actuator is in the application state and the print mode setting specifies a color print setting. (Fig. 16A and 16B discloses the color or monochrome modes for the printer and an object (i.e. print setting mode) for the computer. One can see that in fig. 16A that the tint processing is available for color mode, while the monochrome mode only has the value/contrast processing. Thus having the color mode in the printer is analogous to the application mode as stated)

Regarding claim 4, 12, 19, Nakajima discloses the method of claim 1, wherein the print mode actuator includes at least an application state and a monochromatic override state(color and monochrome modes in Figs. 16A,16B), and the printing of the at least a portion of the document monochromatically or in color based upon the print mode setting and the state of the print mode actuator in the image forming device further comprises implementing an execution of a monochromatic raster image processing of the document if the print mode actuator is in the monochromatic override state and the print mode setting specifies a color print setting, thereby overriding the color print setting in the document. (Fig. 16B shows that even though a photo is selected, the monochrome mode forces a monochrome printing as seen by the fact that the tint option is not available)

Regarding claim 5, 13, 20, 21, 29, Nakajima discloses the method of claim 1, further comprising:

implementing an execution of a raster image processing of the document, wherein the raster image processing is of one of a monochromatic raster image processing or a color raster image processing; (Figs. 16A, 16B, 17, 18, 19)

detecting a change in the state of the print mode actuator during the execution of the raster image processing of the document; (c22, line 66 – c23 line 9) and

transitioning the raster image processing of the document at a transition point in response to the change in the state of the print mode actuator. (switch from Fig. 16A to 16B – the modes are different for the two figures and would lead to conversion from a color to a monochrome processing. It would be obvious to have the transition point be the completion of a document since that allows a processing document to be completed and not have incomplete part that might need to be reprocessed.)

Regarding claim 6, 14, 22, Nakajima discloses the method of claim 5, wherein the transitioning is upon completion of the monochromatic or color raster image processing of a strip of the document that was in progress at the time of the change in the state of the print mode actuator. (Please see claim 5 above)

Regarding claim 7, 15, 23, Nakajima discloses the method of claim 5, wherein the transitioning is upon completion of the monochromatic or color raster image

processing of a page of the document that was in progress at the time of the change in the state of the print mode actuator. (Please see claim 5 above)

Regarding claim 8, Nakajima discloses the method of claim 1, further comprising:
executing one of a monochromatic raster image processing or a color
raster image processing of the document; (Figs. 16A, 16B, 17, 18, 19)

detecting a change in the state of the print mode actuator during the execution of
the one of the monochromatic raster image processing or the color raster image
processing of the document; (c22, line 66 – c23 line 9) and

completing the monochromatic raster image processing or the color raster image
processing of the document even though a change in the state of the print mode
actuator is detected that results in an inconsistency between the state of the print mode
actuator and the raster image processing of the document that was in progress at the
time of the change in the state of the print mode actuator. (switch from Fig. 16A to 16B
– the modes are different for the two figures and would lead to conversion from a color
to a monochrome processing. Also see claim 5 above.)

Conclusion

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Yixing Qin whose telephone number is (571)272-7381.
The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YQ

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625